



P.B. 5818 - Patentlaan 2  
2280 HV Rijswijk (ZH)  
☎ (070) 340 2040  
Tx 31651 epo nl  
FAX (070) 340 3016

Europäisches  
Patentamt  
Zweigstelle in  
Den Haag  
Recherchen-  
abteilung

European  
Patent Office  
Branch at  
The Hague  
Search  
Division

Office européen  
des brevets  
Département à  
La Haye  
Division de la  
recherche

Suckling, Andrew Michael  
Marks & Clerk,  
4220 Nash Court,  
Oxford Business Park South  
Oxford OX4 2RU  
GRANDE BRETAGNE

Datum/Date

28.10.03

Zeichen/Ref./Réf. AMS.P52124EP	Anmeldung Nr./Application No./Demande n°//Patent Nr./Patent No./Brevet n° 02254084.3-2412/
Anmelder/Applicant/Demandeur//Patentinhaber/Proprietor/Titulaire AT&T Corp.	

## COMMUNICATION

The European Patent Office herewith transmits the partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

The applicant's attention is drawn to the following:

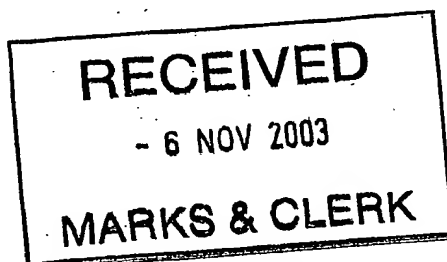
The search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within ONE MONTH after notification of this communication.

If the application has been filed up to 30 June 1999, the search fee in force before 01 July 1999 (EUR 869,--) or the equivalent applicable on the date of payment is payable.

**This applies also to the search fees requested under Rule 46(1) EPC.**

See also OJ EPO 06/1999, 405.

- ☐ The abstract was modified by the Search Division and the definitive text is attached to the present communication.
- ☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.



Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement to OJ EPO 02/1999.

REGISTERED LETTER



European Patent  
Office

# PARTIAL EUROPEAN SEARCH REPORT

under Rule 46, paragraph 1 of the European Patent Convention

Application Number

EP 02 25 4084

## DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 6 041 048 A (ERICKSON PAUL M ET AL) 21 March 2000 (2000-03-21) * column 3, line 51 - column 4, line 52 *	1-21	H04L12/28 H04L29/06
Y	* column 5, line 61 - column 6, line 21 * * column 6, line 22 - line 41 * * figure 1 *	26-45	
Y	EP 0 708 572 A (AT & T CORP) 24 April 1996 (1996-04-24) * column 1, line 58 - column 2, line 8 * * column 3, line 30 - line 33 * * column 3, line 38 - column 5, line 11 * * column 25, line 40 - line 46 * * column 42, line 34 - line 40 * * figures 7,9 *	26-45	
A	EP 0 766 490 A (NOKIA MOBILE PHONES LTD) 2 April 1997 (1997-04-02) * page 3, line 25 - line 56 * * page 4, line 16 - line 28 * * page 7, line 40 - line 49 * * figures 1,2 *	1-5, 26-29,38	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H04Q H04L

## LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

The present partial European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.

Place of Search

MUNICH

Date of completion of the search

15 October 2003

Examiner

GLASSER, J-M

### CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone  
Y : particularly relevant if combined with another document of the same category  
A : technological background  
O : non-written disclosure  
P : intermediate document

T : theory or principle underlying the invention  
E : earlier patent document, but published on, or after the filing date  
D : document cited in the application  
L : document cited for other reasons

& : member of the same patent family, corresponding document





The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-21, 26-45

The method and architecture of the first invention claimed by Claims 1-21, 26-45 relate to the problem of implementing a virtual private wireless network in existing heterogeneous networks.

The problem is solved by means for providing access functions for connecting a service provider's broadband packet network to a Residential/business Broadband Network RBN via a service provider's broadband transport network and means for providing call & service termination functions to a plurality of local RBN devices.

2. Claims: 22-25

Claims 22-25 deal with the problem of connecting heterogeneous wired or wireless standardized terminals (e.g. GPRS or WLAN 802.11b) to a variety of standardized packet network broadband links (e.g. Ethernet or xDSL).

In order to solve the problem, the second claimed invention makes use of case specific forwarding of signals, in particular of a method comprising the steps of:

- accepting signals from a plurality of wireless devices or tip/ring interfaces and
- forwarding said signals to one of a first IEEE 802.11 or Ethernet) and a second (Ethernet or broadband) interfaces.

3. Claims: 46-48

Claims 46-48 concern constructional details of an apparatus (i.e. access port, radio terminal adapter, broadband access point) for connecting a first interface (e.g. a wireless or analog phone) to a second interface (e.g. Ethernet or broadband transport), and especially details relating to signal conversion and digital signal processing. In particular, chips for performing analog modulation and demodulation functions of at least two standardized interfaces are included, and a timing and control unit for setting timing and control for all elements of the apparatus is comprised.

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 25 4084

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-10-2003

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6041048	A	21-03-2000	CN	1305685 T	25-07-2001
			EP	1086596 A1	28-03-2001
			WO	9965255 A1	16-12-1999
EP 0708572	A	24-04-1996	US	5633868 A	27-05-1997
			CN	1133540 A ,B	16-10-1996
			EP	0708572 A2	24-04-1996
			JP	2977474 B2	15-11-1999
			JP	8242231 A	17-09-1996
EP 0766490	A	02-04-1997	FI	954639 A	30-03-1997
			EP	0766490 A2	02-04-1997
			JP	9130405 A	16-05-1997
			US	5956331 A	21-09-1999
US 6029067	A	22-02-2000	DE	19525363 A1	16-01-1997
			AU	713987 B2	16-12-1999
			AU	5941596 A	23-01-1997
			EP	0753976 A2	15-01-1997
			US	6445920 B1	03-09-2002
			ZA	9605970 A	16-04-1997

